

WHAT IS CLAIMED IS:

1. A high-frequency circuit for branching high-frequency signals for pluralities of communications systems of different frequencies, which comprises
  - 5 a lowpass filter circuit disposed between first and second ports and/or a highpass filter circuit disposed between said first port and a fourth port; and
    - a matching circuit and a bandpass filter circuit disposed between said first port and a third port;
  - 10 said lowpass filter circuit, said highpass filter circuit and said matching circuit comprising capacitance elements and inductance elements;
    - said bandpass filter circuit being a SAW filter; and
    - the passband  $f_1$  of said lowpass filter circuit, the passband  $f_2$  of said bandpass filter circuit, and the passband  $f_3$  of said highpass filter circuit
  - 15 meeting the condition of  $f_1 < f_2 < f_3$ .
2. The high-frequency circuit according to claim 1, wherein said matching circuit comprises an inductance element connected between said first port and a ground, said inductance element having a Q value of 20 or more at 250 MHz to absorb electrostatic surge.
- 20 3. The high-frequency circuit according to claim 1, wherein a diplexer circuit comprising a capacitance element and an inductance element is connected to any one of said second to fourth ports.
4. The high-frequency circuit according to claim 1, wherein a switch circuit comprising a switching element is connected to any one of said second to fourth ports.
- 25 5. The high-frequency circuit according to claim 1, wherein said SAW filter comprises a balanced port connected to said third port, and an unbalanced port connected to said first port.

6. The high-frequency circuit according to claim 5, wherein a matching circuit comprising an inductance element and/or a capacitance element is connected to the balanced port of said SAW filter.

7. The high-frequency circuit according to claim 1, wherein said first  
5 port is connected to a multi-band antenna.

8. A high-frequency device comprising  
a lowpass filter circuit disposed between a first port and a second  
port and/or a highpass filter circuit disposed between said first port and a  
fourth port; and

10 a matching circuit and a bandpass filter circuit disposed between  
said first port and a third port;

said lowpass filter circuit and/or said highpass filter circuit, and  
said matching circuit comprising capacitance elements and inductance  
elements;

15 at least part of circuit elements (inductance elements and  
capacitance elements) constituting said highpass filter circuit, said lowpass  
filter circuit and said matching circuit being formed by electrode patterns and  
contained in a laminate substrate, and the remaining circuit elements and a  
SAW filter being mounted onto said laminate substrate.

20 9. The high-frequency device according to claim 8, wherein electrode  
patterns constituting the inductance element and the capacitance element of  
said highpass filter circuit, electrode patterns constituting the inductance  
element and the capacitance element of said lowpass filter circuit, and  
electrode patterns constituting the inductance element and the capacitance  
25 element of said matching circuit are disposed, such that they do not overlap  
each other in a lamination direction of said laminate substrate.

10. The high-frequency device according to claim 8, wherein the  
capacitance element and the inductance element constituting said matching

circuit are mounted onto said laminate substrate.

11. The high-frequency device according to claim 10, wherein said inductance element for said matching circuit comprises a core having a leg at each end, a coil wound around said core, and a terminal electrode disposed on  
5 the lower side of said leg and connected to an end of said coil, said core being made of a non-magnetic, alumina-based ceramic material.

12. The high-frequency device according to claim 8, wherein a ground electrode is formed substantially on an entire surface of a layer close to a mounting surface of said laminate substrate to prevent interference with a  
10 mounting substrate, and LGA (land grid array) terminal electrodes are formed on the mounting surface of said laminate substrate, said terminal electrodes being connected to each filter through via-holes.

13. The high-frequency device according to claim 8, wherein the passband f1 of said lowpass filter circuit, the passband f2 of said bandpass  
15 filter circuit, and the passband f3 of said highpass filter circuit meet the condition of  $f1 < f2 < f3$ .